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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,763	08/15/2001	Francesco Grilli	PA510B2B1	2384

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QUALCOMM, INC
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EXAMINER	
SAM, PHIRIN	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/930,763	GRILLI ET AL.	
	Examiner	Art Unit	
	Phirin Sam	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11 and 14-18* is/are rejected.

7)☒ Claim(s) *12 and 13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

PHIRIN SAM
PRIMARY EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11002&31904*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-3, 4-5, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,212,368 (hereinafter referred as "Ramesh").

Ramesh discloses the invention (**claims 1-3**) as claimed including a method for performing a search excursion from an original frequency on a wideband code division multiple access (WCDMA) system to a target frequency comprising:

(a) decoding at least one radio frame in a transmission Time Interval (TTI) on the original frequency (see Fig. 7, col. 8, lines 47-49, wherein signals received on the first antenna (original frequency) is determined (decoding or processing);

(b) extracting a parameter value from the at least one radio frame and storing the value in a memory element (see Fig. 7, col. 8, lines 50-51);

(c) tuning to a target frequency after storing parameter value (see Fig. 7, col. 8, lines 52-53, wherein the terminal switches to the second antenna (target frequency));

(d) tuning to the original frequency (see Fig. 7, col. 8, line 56);

(e) decoding a subsequently received radio frame in the TTI by using the stored parameter value (see Fig. 7, col. 8, lines 58-59, wherein the signal strengths form the respective first and second antennas are compared. The comparing these signals is obviously decoding, processing in order to compare).

Regarding claims 4-6, Ramesh discloses a method for performing timing a search excursion performed by a mobile station operating in a spread spectrum communications system comprising:

(a) detecting a first radio frame of a transmission time interval (TTI) on an original frequency (see Fig. 7, col. 8, lines 47-48);

(b) extracting a plurality of indicator bits from the first radio frame (see Fig. 7, col. 8, lines 50-51);

(c) storing the plurality of indicator bits (see Fig. 7, col. 8, lines 50-51);

(d) performing the search excursion on a target frequency, wherein the search excursion ends with a return to the original frequency (see Fig. 7, col. 8, lines 52-57);

(e) decoding a subsequent radio frame of the TTI using the stored plurality of indicator bits from the first radio frame (see Fig. 7, col. 8, lines 58-59, wherein the signal strengths form the

respective first and second antennas are compared. The comparing these signals is obviously decoding, processing in order to compare).

Regarding claim 10, Ramesh discloses an apparatus for performing a timed search excursion in a wireless communication system, comprising:

(a) means decoding at least one radio frame in a Transmission Time Interval (TTI) on the original frequency (see Fig. 7, col. 8, lines 47-49, wherein signals received on the first antenna (original frequency) is determined (decoding or processing);

(b) extracting a parameter value from the at least one radio frame and storing the parameter value in the at least one memory element (see Fig. 7, col. 8, lines 50-51);

(c) means for performing a frequency search on a target frequency and returning to the original frequency, whereupon the means for decoding the at least one radio frame further decodes a subsequently received radio frame by using the stored parameter value (see Fig. 7, col. 8, lines 52-61).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 7-11 and 14-18are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,212,368 (hereinafter referred as "Ramesh") in view of US Patent 6,385,437 (hereinafter referred as "Park").

Regarding claims 9 and 11, Ramesh discloses an apparatus for performing a timed search excursion in a wireless communication system, comprising:

(a) decoding at least one radio frame in a Transmission Time Interval (TTI) on the original frequency (see Fig. 7, col. 8, lines 47-49, wherein signals received on the first antenna (original frequency) is determined (decoding or processing);

(b) extracting a parameter value from the at least one radio frame and storing the parameter value in the at least one memory element (see Fig. 7, col. 8, lines 50-51);

(c) controlling a search excursion to a target frequency after storing the parameter value, wherein the search excursion ends with a return to the original frequency (see Fig. 7, col. 8, lines 52-57);

(d) decoding a subsequently received radio frame by using the stored parameter value (see Fig. 7, col. 8, lines 58-59, wherein the signal strengths form the respective first and second antennas are compared. The comparing these signals is obviously decoding, processing in order to compare).

Ramesh does not disclose a memory element and a processor configured to execute a set of instructions stored on the at least one memory element. However, Park discloses disclose a

memory element and a processor (see Figs. 3, 6, elements 114 and 113, col. 6, lines 46-67, col. 7, lines 1-2, 56-66, and col. 10, lines 51-61). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the memory and the processor teaching by Park with Ramesh. The motivation for doing so would have been to provide for performing regular power control for a frame duration, which includes a target frequency measuring duration, during an inter-frequency hand-off in a mobile communication system read on column 4, lines 28-32. Therefore, it would have been obvious to combine Park and Ramesh to obtain the invention as specified in the claims 9 and 11.

Regarding claims 7, 8, and 14-18, Ramesh discloses all limitations. On the other hand, Ramesh does not disclose increasing the amount of power allocated to subsequently received radio frames of the plurality of associated radio frames. However, Park discloses increasing the amount of power allocated to subsequently received radio frames of the plurality of associated radio frames (see Figs. 3 and 6, element 114, col. 6, lines 63-66, col. 6, lines 56-66, and col. 10, lines 24-61). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine increasing the amount of power allocated to subsequently received radio frames of the plurality of associated radio frames teaching by Park with Ramesh. The motivation for doing so would have been to provide for performing regular power control for a frame duration, which includes a target frequency measuring duration, during an inter-frequency hand-off in a mobile communication system read on column 4, lines 28-32. Therefore, it would have been obvious to combine Park and Ramesh to obtain the invention as specified in the claims 7, 8, and 14-18.

Allowable Subject Matter

6. Claims 12 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(1) US Patent 6,611,506 (Huang et al) discloses enhanced channel allocation among multiple carriers in a spread spectrum communications system.

(2) US Patent 6,252,861 (Bernstein et al) discloses methods and apparatus for inter-frequency handoff in a wireless communication system.

(3) US Patent 6,181,943 (Kuo et al) discloses method and apparatus for inter-frequency hand-off in wireless communication systems.

(4) US Patent 5,953,324 (Adachi) discloses CDMA mobile communication method, system and mobile station apparatus.

(5) US Patent 5,706,315 (Ogoro) discloses automatic frequency control device for tuning an intermediate frequency signal to a target frequency.

(6) US Patent 5,450,621 (Kianush et al) discloses radio receiver with digital control loop for coarse frequency acquisition and analog control loop for frequency lock-in.

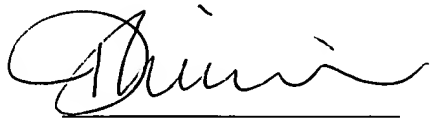
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phirin Sam whose telephone number is (571) 272-3082. The examiner can normally be reached on a compress schedule, from 8:00-5:30, first Wed off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272 - 3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Respectfully submitted,

Date: June 9, 2006



PHIRIN SAM
PRIMARY EXAMINER